

# STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR KIM REYNOLDS, LT. GOVERNOR

## STEM ADVISORY COUNCIL BROADBAND COMMITTEE

Co-Chair John Carver, Superintendent, Howard-Winneshiek Community School District
Co-Chair Robert von Wolffradt, Chief Information Officer, State of Iowa
Amy Kuhlers, Program Manager, Connect Iowa
Robert Denson, President, Des Moines Area Community College
Dave Duncan, President, Iowa Telecommunication Association
Philip Groner, Iowa Communication Network
Karl Hehr, Director of Technology Services, Ames Community Schools District
Galen Howsare, Chief Financial Officer, Iowa Association of School Boards
Karen Randall, Keystone Area Education Association
Michael Sadler, Assistant VP for Public Policy
Larry Siegel, Iowa School Finance and Information System Services
Jeff Weld, Executive Director, Governor's STEM Advisory Council
Josh Byrnes, State Representative, District 14
Steven Sodders, State Senator, District 36

September 19, 2013

The STEM Advisory Council Broadband Committee is soliciting input from stakeholders all across lowa who can offer insights into the unique broadband challenges facing the state, as well as provide thoughts on possible solutions. This input will help enhance efforts in developing effective policy recommendations to expand broadband access, adoption and use for all lowans.

To offer comments, please address the questions below. All responses are considered public information, so please do not include confidential information in your response.





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- I. What barriers or other issues can you identify that may impede the increase of broadband access, adoption and use across the state?
  - Lack of consistent availability and reliable performance of broadband solutions across our geography.
    - Local telephone companies and cooperatives sometimes lack funds or motivation to improve or even provide adequate bandwidth through their voice infrastructure.
       Although DSL is often available, performance makes the service nearly unusable.
    - Infrastructure supporting 4G broadband lacks consistency from location to location. Although a consumer may have a strong 4G signal, performance is constrained by the scale of the "in ground" infrastructure connecting the tower to the internet. This makes cellular broadband inconsistent and therefore unreliable as a primary connection for home or business.
    - Satellite and point-to-point solutions offer more flexibility in coverage but are also inconsistent performers based on location and location-specific characteristics such as terrain, trees and other obstructions to good signal quality.
  - Complexity and scale.
    - Internet connectivity options are very technical and difficult for people to understand. Buying satellite, cellular broadband (4G) or point-to-point solutions is confusing for most AND installation and service beyond installation is inadequate for most non-technical. There is no "phone company guy" to come out and install/fix your internet.
    - Large organizations may install private network connections to rural locations in the state but still require robust connectivity solutions to support a mobile employee base. Work from home and mobile access to work related toolsets (email, calendar, chat, video, etc) is a requirement for a modern workforce.
    - Smaller organizations are typically reliant on public infrastructure and more reliant on a disbursed or remote workforce. Most rural areas lack infrastructure to support a business.





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II. If you had to choose one *primary* barrier, what would that be?

Common standards for scale (therefore performance) and availability. If you're in the state of lowa, your service should meet some standard.

- III. What recommendations do you have to overcome these barriers?
- IV. What are your expectations for future access needs?

Internet access will continue to grow for private citizens and for business. If you are going to operate in the rural parts of the state, there must be adequate access to high-performing infrastructure. Publically owned infrastructure (ICN) will require ongoing investment to provide appropriate service to public schools and colleges/universities.

V. Other comments?

